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2

DOE's Accident Investigation Program

A primary mission of DOE is to operate its programs and facilities with a high level of safety. The accident investigation process has been designed to meet DOE safety objectives by responding to accidents in a highly coordinated, timely, and focused manner.

Specifically, the objectives of DOE's accident investigation program are to:

- Contribute to improved environmental protection and enhanced safety and health of DOE employees, contractors, and the public
- Prevent the recurrence of accidents
- Reduce accident fatality rates and promote a downward trend in the number and severity of accidents.

To accomplish these objectives, the accident investigation process must respond with speed, accuracy, focus, and brevity. The results of accident investigations can help managers eliminate underlying causes, prevent similar accidents, and enhance safety across the DOE complex. However, to achieve maximum benefit, accident investigations need to be convened rapidly, staffed and supported adequately, focused on pertinent and essential facts and causation, conducted accurately and thoroughly, concluded quickly, and reported clearly and concisely. Analytical techniques used to draw conclusions and to establish causes must be valid, appropriate, and easy

to use. Finally, sound judgments of need promote better safety practices, address systemic problems, and when implemented, help prevent future occurrences.

2.1 Overall Management of the Program

The DOE Accident Investigation Program Manager (referred to throughout the workbook as the "Program Manager") in the Office of Security Evaluations, Office of Oversight, administers the program on behalf of the Assistant Secretary for Environment, Safety and Health (EH-1). The Program Manager is the central focal point for field and program office points of contact for program administration and training coordination.

2.2 Roles and Responsibilities of Key Participants

2.2.1 Appointing Officials and Line Management Participants

A number of groups and individuals play important roles in DOE's accident investigation program. These individuals and groups and their primary responsibilities are listed in Table 2-1.

Table 2-1. Appointing officials and line management participants in accident investigations have clearly defined responsibilities.

Participants	Major Responsibilities
Appointing Official	<ul style="list-style-type: none"> ■ Formally appoints the accident investigation board in writing within three days of accident categorization ■ Establishes the scope of the board's authority, including the review of management systems, policy, and line management oversight processes as possible root causes ■ Briefs board members within three days of their appointment ■ Ensures that notification is made to other agencies, if required by memoranda of understanding, law, or regulation ■ Emphasizes the board's authority to investigate the causal roles of organizations, management systems, and line management oversight up to and beyond the level of the appointing official ■ Accepts the investigation report and the board's findings ■ Publishes and distributes the accident investigation report within seven calendar days of report acceptance ■ Develops lessons learned for dissemination throughout the Department ■ Closes the investigation after the actions in DOE Order 225.1A, Paragraph 4d, are completed
Heads of Field Elements	<ul style="list-style-type: none"> ■ Maintain a cadre of qualified¹ accident investigation board chairpersons and DOE accident investigators ■ Ensure that DOE and contractor organizations are prepared to effectively accomplish initial investigative actions and assist accident investigation boards ■ Categorize the accident investigation in accordance with the algorithm provided in Attachment 2 of DOE Order 225.1A ■ Report accident categorization and initial actions taken by site readiness teams to the Office of the Deputy Assistant Secretary for Oversight (EH-2) ■ Serve as the appointing official for Type B and delegated Type A accident investigations ■ Ensure that readiness teams and emergency management personnel coordinate their activities to facilitate an orderly transition of responsibilities for the accident scene ■ Develop lessons learned for Type B accident investigations ■ Develop and submit (nominally within 30 days of report acceptance by the appointing official) corrective action plans to address judgments of need identified by accident investigation boards ■ Provide biannual status reports of accident investigation corrective actions to the Office of the Deputy Assistant Secretary for Oversight until all corrective actions are completed

¹ Federal employees serving as board chairpersons or accident investigators shall have attended an accident investigation course of instruction that is based on current materials developed by the Office of the Deputy Assistant Secretary for Oversight. This requirement is effective October 1, 1998.

Table 2-1. Appointing officials and line management participants in accident investigations have clearly defined responsibilities. (Continued)

Participants	Major Responsibilities
Field and Program Office Points of Contact	<ul style="list-style-type: none"> ■ Maintain a state of readiness to conduct investigations throughout the field element, their operational facilities, and the site readiness teams ■ Ensure that sufficient numbers of site DOE and contractor staff understand and are trained to conduct or support investigations and use appropriate equipment ■ Procure appropriate equipment to support investigations ■ Maintain a current list of DOE and contractor staff trained in conducting or supporting investigations ■ Oversee the activities of the site readiness team ■ Assist readiness teams in coordinating investigation activities with accident mitigation measures taken by emergency response personnel ■ Communicate and transfer information on accidents to the head of the field elements, cognizant secretarial officer, or Headquarters element to whom they report ■ Communicate and transfer information to the accident investigation board chairperson before and after his/her arrival on site ■ Coordinate corrective action planning and followup with the head of the field element and coordinate comment resolution by reviewing parties ■ Assist heads of field elements in tracking implementation of corrective action plans ■ Facilitate distribution of lessons learned identified from accident investigations ■ Serve as liaison to the Program Manager on accident investigation matters

2.2.2 The Accident Investigation Board

When an accident occurs, the board must be rapidly assembled to collect the facts, conduct the investigation, reach conclusions,

and prepare a report. The board's overall responsibilities are listed in Table 2-2. Responsibilities for those individuals who comprise the investigation board are described below.

Table 2-2. The accident investigation board has these major responsibilities.

Participants	Major Responsibilities
Accident Investigation Board	<ul style="list-style-type: none"> ■ Conducts a comprehensive investigation within the defined scope and allotted time frame, collects all pertinent information, and determines the facts relevant to the accident ■ Analyzes facts and determines causal factors that contributed to the accident, with particular emphasis on determining root causes ■ Analyzes the causal role, if any, of organizations, management systems, and oversight up to and beyond the level of the appointing official ■ Identifies judgments of need that must be addressed to prevent recurrence of the accident ■ Reports the essential facts and results of the investigation in a concise and understandable manner ■ Maintains appropriate communications with interested organizations throughout the investigation ■ Ensures the quality and accuracy of its activities ■ Assists the appointing official in closing the investigation, if requested

2.2.2.1. Board Chairperson

The board chairperson manages the investigation by coordinating the efforts of the board members, advisors/consultants, and support staff. The board chairperson is responsible to the appointing official for all aspects of the investigation. The chairperson maintains control of the accident scene until it is no longer needed for the investigation. The chairperson does not normally conduct investigative activities, but rather directs the overall effort, keeping it focused and on schedule.

If unlawful activity is revealed during the investigation, the chairperson notifies DOE and appropriate Federal, state, or local authorities, or in the case of fraud, waste, or abuse, the DOE Office of the Inspector General. If any Price-Anderson concerns are revealed, the chairperson notifies the Director, Office of Enforcement and Investigation (EH-10) (see Section 5.2.5 of this workbook).

The chairperson's specific roles and responsibilities include:

- Taking control of the investigation from the site readiness team
- Providing leadership and managing board activities by:
 - Establishing and communicating the roles and responsibilities of board members, advisors, consultants, and support staff
 - Building effective team relationships with and among board members
 - Planning, scheduling, and coordinating activities
 - Establishing and meeting deadlines
- Remaining continuously informed of the investigation's progress and status
- Ensuring that the board is supported by appropriate advisors and consultants with specialized expertise, as needed
- Serving as the point of contact with the appointing official and DOE management at the site, facility, or area where the accident occurred, and representing DOE in all matters pertaining to the investigation
- Coordinating with, and communicating board activities to, interested managers and organizations who are stakeholders with a legitimate interest in the accident
- Ensuring an effective and efficient investigation that thoroughly examines all potential causal factors, including management systems, within the allotted time frame
- Generating a quality report of the investigation
- Following report acceptance by the appointing official, conducting a briefing, together with the head of the field element, to Headquarters and field line management, as well as to the Assistant Secretary for Environment, Safety and Health (for Type A investigations), on the outcome of the investigation.

2.2.2.2 Board Members

Board members are primarily responsible for collecting and analyzing information, reaching conclusions regarding causal factors, identifying judgments of need, and writing the report. Board members apply investigative and analytical techniques to make these determinations.

2.2.2.3 Advisors and Consultants

Advisors and consultants are used at the discretion of the chairperson whenever the circumstances of an accident require specialized expertise or special knowledge of the accident itself is required. These individuals may include:

- **Legal advisor**—helpful in dealing with legal issues that may arise, including liability issues and concerns related to the Freedom of Information and Privacy Acts. DOE counsel from the operations or field office having cognizance over the site, area, or facility involved generally fulfills this role. If this is not feasible, an attorney from the Office of General Counsel can assist the board.
- **Medical advisor**—a key person in any investigation involving an injury, illness, or death. The board may obtain advice from a physician to clarify medical issues early in the investigation.
- **Technical experts**—provide valuable expertise during investigations involving technical information about operations, policy, hazards, failure modes, component testing, and systems.
- **Professional/technical photographer**—critical for providing an accurate photographic record of evidence and the accident scene, using techniques not commonly known to investigators.
- **Site personnel**—may contribute specific knowledge of processes or activities in areas such as metallurgy, chemistry, electrical operations, or conduct of operations.
- **Union advisor**—can provide information on work practices, facilitate interviews with union members, and convey to workers the board's desire to assure that the accident is thoroughly investigated.

2.2.2.4 Support Staff Roles

The investigation board uses support staff to handle administrative functions or to provide expertise not available from members, consultants, and advisors. The following support positions are recommended:

- **Administrative coordinator.** This individual should be familiar with the administrative and logistical needs and processes of an accident investigation and be able to provide daily coordination of these matters. Other functions include tracking and controlling documentation, tracking appointments, assigning administrative tasks and priorities, and coordinating report production (a detailed list of responsibilities is included in Appendix C).
- **Analyst.** An individual trained in and knowledgeable of the various analytical techniques that can be used to support the accident investigation process (see Section 7 of this workbook). Board members have the responsibility for collecting and analyzing information; however, a dedicated analyst can recommend the proper analytical tools based on the type and complexity of the accident and process the information using the tools selected, allowing the board members to concentrate on the results of the analysis.
- **Technical writer/editor.** This person can facilitate the report writing process. While board members have primary writing responsibilities, use of a dedicated writer focuses responsibility for assembling the report, facilitates report preparation, and results in a more cohesive and readable report.
- **Typist/text processor.** A board usually needs at least one typist to perform general secretarial and administrative tasks, such as filing, word processing, and answering telephones. These

personnel can often be provided by the facility where the investigation is being conducted.

- **Court reporters.** Using a court reporting service increases the timeliness and accuracy of interview transcripts. The use of court reporters gives all members of the board the opportunity to review interviews in which they did not participate and provides a transcript for reconstructing or developing the chronology of events preceding the accident. When an investigation requires numerous interviews, use of court reporters is essential and can help prevent the investigation from getting behind schedule in its early stages, when most of the interviewing takes place and when the information from interviews is needed. This service is available commercially in most areas.

2.3 Site Readiness

DOE Order 225.1A and its Attachment 1, *Contractor Requirements Document*, establish requirements and responsibilities for heads of field elements and contractors to:

- Support Type A, Type B, and limited scope accident investigations
- Establish and maintain readiness to respond to accidents.

Site readiness is an important, ongoing part of DOE's accident investigation program. This section addresses responsibilities of points of contact and heads of field elements, as well as activities needed to implement those responsibilities, in meeting site readiness requirements.

2.3.1 Readiness — What Is It?

Readiness to conduct accident investigations means preparing in advance to:

- Respond to accidents
- Mitigate the consequences of an accident
- Preserve the accident scene and collect and control critical initial evidence —physical, human (given through witness statements or interviews), and documentary (including photographic media)
- Assist the accident investigation board with investigations.

To implement these requirements, the site's point of contact and designated readiness teams normally:

- Assist the head of the field element in categorizing accident severity by using the accident categorization algorithm in Attachment 2 to DOE Order 225.1A and Table 1 of the *Implementation Guide for Use with DOE Order 225.1A*
- Assist in reporting events (in accordance with DOE Order 225.1A and DOE Order 232.1, *Occurrence Reporting and Processing of Operations Information*)
- Assist in restoring operations, if requested
- Document the accident scene through photography or other means
- Provide facilities, equipment, supplies, tools, and general administrative and logistical support for accident investigations
- Conduct initial investigative activities
- Provide sufficient numbers of DOE board chairpersons and accident investigators and, if requested, provide them to other DOE sites
- Transfer control and custody for the accident scene and evidence to the board chairperson when he/she arrives at the site.

Readiness teams coordinate their actions with or are integrated with emergency management personnel. The team's composition, location, equipment, and other characteristics are determined by field elements and their contractors. The operation of equipment for the team should be documented in procedures and its performance should be periodically tested.

A well trained readiness team that participates in the initial response to an accident can provide valuable assistance to the accident investigation board when it assembles on site. DOE and contractor managers should ensure that accident responders and readiness teams can complete the immediate and near-term steps that will facilitate the investigation. When an accident occurs, immediate actions include taking charge of the accident scene quickly, initiating any required emergency response, assisting injured parties, ameliorating the accident conditions, and preserving and protecting evidence and the accident scene for later investigation. Each field element is responsible for maintaining a readiness capability to respond to accidents in this manner.

To ensure the capability for the necessary rapid response, heads of field elements and designated points of contact should ensure that:

- Sufficient numbers of readiness team personnel and prospective accident investigation board personnel are trained and available
- Adequate procedures for initial response have been established
- Equipment is available and functional
- The necessary infrastructure can be quickly assembled to respond to the accident and support the accident investigation.

Managers, through points of contact, evaluate the need for site- or organization-specific training to ensure that sufficient numbers of staff are available to perform these functions.

In determining the number and qualifications of potential accident investigation board members, consideration should be given to the need for supporting other Departmental elements by providing chairpersons and board members. Contracts that address accident readiness by contractors should be modified to include these provisions under DOE Order 225.1A, if they are not adequately addressed in existing contracts. The benefits of incorporating initial investigative or investigative support actions into emergency preparedness plans and drills should also be considered. It is important to ensure coordination between readiness teams and emergency management personnel to facilitate an orderly transition of responsibilities for the accident scene.

An important element in establishing site readiness is to ensure that both the DOE field element and contractors work together to ensure that the site has a well coordinated and effective capability for responding to accidents. This capability includes:

- Clearly documented and coordinated procedures, roles, responsibilities, authorities, and accountabilities
- Adequate resources to support investigations
- Focused training for the field or program office points of contact and the site readiness team
- Periodic practice and evaluation.

2.3.2 Establishing Written Procedures and Responsibilities

DOE field elements should have clearly documented and integrated procedures, roles, responsibilities, authorities, and accountabilities in their implementation directives for establishing and maintaining site readiness. In addition, their contractors establish and document their own procedures to identify their organizations' operations in response to an accident or incident. Both field- and organization-specific site readiness programs should:

- Contain appropriate detail regarding the specific responsibilities and activities that make up the accident response approach
- Provide clearly formulated guidelines that address decisions involving tradeoffs between accident mitigation/restoration of operations and accident scene/evidence preservation
- Be consistent with DOE orders
- Be coordinated with the emergency response program
- Be adequately communicated to the people responsible for taking or directing action in response to accidents.

Site readiness procedures should cover the activities indicated in Section 2.3.1.

2.3.3 Maintaining Resources to Support Accident Investigations

Sufficient resources to support an onsite accident investigation should be in place or readily available.

The specific composition of the site readiness team is determined by the field elements and their contractors. Ideally, the team should include individuals currently involved in the emergency response

function. Field elements are also responsible for assuring that DOE and contractor organizations have mechanisms in place to provide enough qualified personnel to serve as accident investigation board chairpersons and members to support DOE accident investigations at other sites.

They also assure that other resources are readily accessible. These resources include reference documents, site references, office equipment, tools, measurement devices, office supplies, and protective gear. The *Accident Investigation Equipment Checklist* (provided at the end of this section) is a tool that field elements can use to assure that adequate resources to support accident investigations are readily available at the site.

TIP

To determine the necessary number of trained site readiness personnel, consider both the site's readiness needs and the site's obligation to supply accident investigators and accident investigation chairpersons to other DOE sites.

2.3.4 Training for Site Readiness

Site readiness requires formal training for the points of contact and site readiness team members. In addition, training for emergency response teams should ensure that when they respond to an accident, they consider the need to preserve the accident scene and evidence. Line managers and supervisors also need instruction in accident response; if they are present at an accident scene, these persons can be very useful in providing background about the event (e.g., people involved, witnesses present, equipment involved, material involved, and environmental factors).

The field element is responsible for identifying the minimum site- and organization-specific training requirements to support the site readiness capability.

Managers within affected organizations then develop appropriate training based on these requirements and site-specific needs.

Field elements or program offices are responsible for coordinating with the Program Manager to assure that DOE and contractor staff are trained in accident investigation techniques and readiness. In particular, the field or program office point of contact verifies that site readiness personnel responding immediately following an accident have been trained in:

- Initial reporting and categorization of events (in accordance with DOE Order 225.1A and DOE Order 232.1)
- Photographing and videotaping the accident scene
- Identifying, collecting, controlling, and preserving evidence and information
- Performing other initial investigative functions, such as taking witness statements and determining the fitness-for-duty status of all individuals injured in the accident
- Transferring responsibility for the accident scene, evidence, and documentation to the accident investigation board.

In addition to needing to know how, when, where, and to whom to report an accident and how to summon emergency help, those responding to an accident must know what actions they can take, and what actions require skilled and qualified emergency response professionals. Emergency personnel who direct and coordinate emergency response and rescue operations need to know what equipment, materials, and protective gear are required; how and where they are obtained; and what training or qualifications are required for their use. They also need to know the risks, hazards, or peculiarities of the operation, process, or facility involved, as well as what specialized knowledge, skills, procedures, and equipment are needed to handle them

safely. They must know what means are needed and available to control and limit injuries and losses and to prevent emergency teams, rescuers, and investigative readiness teams from causing additional injury or loss or becoming casualties themselves.

Site readiness personnel who are prospective DOE accident investigators and chairpersons, as well as the field or program office point of contact, should attend an accident investigation course of instruction that is based on current materials developed by the Office of the Deputy Assistant Secretary for Oversight and must have the appropriate qualifications through experience in conducting comparable investigations.

2.3.5 Conducting Periodic Practices and Evaluations

To be effective, site readiness plans and procedures should be practiced and evaluated periodically. Because of the need for coordinated efforts, the benefits of incorporating the site readiness actions into emergency preparedness plans/procedures, as well as combining drills for site readiness and emergency preparedness, should be considered. Readiness teams can be evaluated during drills by having appropriate team members demonstrate tasks and functions such as:

- Collecting and storing evidence
- Identifying witnesses and taking statements
- Preparing an information transition plan for a board chairperson.

2.4 Accident Investigation Process Overview

The major activities between the accident and the end of the accident investigation are shown in Figure 2-1. They are discussed in detail in Part II of this workbook.

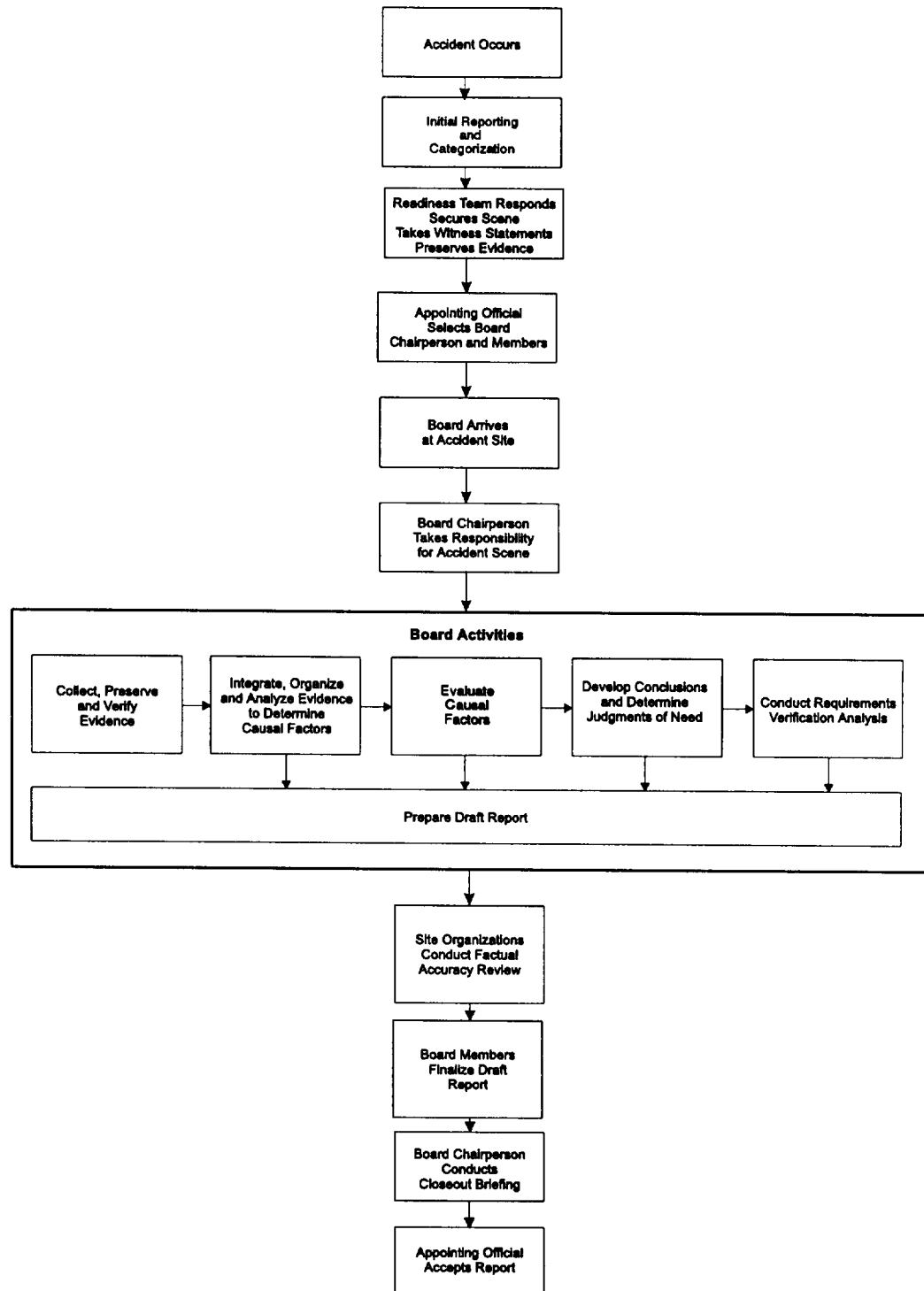


Figure 2-1. The process used to conduct an accident investigation involves many activities.

A nominal 30-calendar-day time frame, beginning with the date of the board appointment and ending with submission of the accident report, has been established by DOE as a target for completing Type A and Type B accident investigations. The timeline and schedule of activities, illustrated in Table 2-3, is flexible and depends on specific accident circumstances, severity, and complexity. The appointing official should attempt to identify any circumstances that may prolong this 30-day timeline and make appropriate adjustments to the completion date. The board chairperson should be aware of potential delays and make adjustments as early as possible. Figure 2-2 demonstrates how the three primary activity phases of an accident investigation overlap during the accident investigation cycle.

Table 2-3. The timeline for a Type A or Type B accident investigation requires conducting multiple simultaneous tasks.*

Timeframe	Activities
Week 1	Collecting evidence, conducting interviews, conducting tests (engineering, chemical, non-destructive, etc.), initiating analysis, and beginning development of the report.
Week 2	Further collection of data, more in-depth analysis, and report writing by the board.
Week 3	Additional interviews, data analysis, and report writing. Additional data collection as needed to fill gaps identified in analyses. Factual accuracy check by site DOE and contractor line management. At end of the week, the board briefs site DOE and contractor line management on facts, conclusions, and judgments of need.
Week 4	Report completion, editing, and formatting; report review by Office of Oversight; report submittal to the appointing official.

* Limited scope investigations are permitted, if no substantial lessons learned would be expected from conducting a full scope investigation. For limited scope investigations, these activities are expected to be completed within 10-14 days, as discussed in Section 2.6 of this workbook.

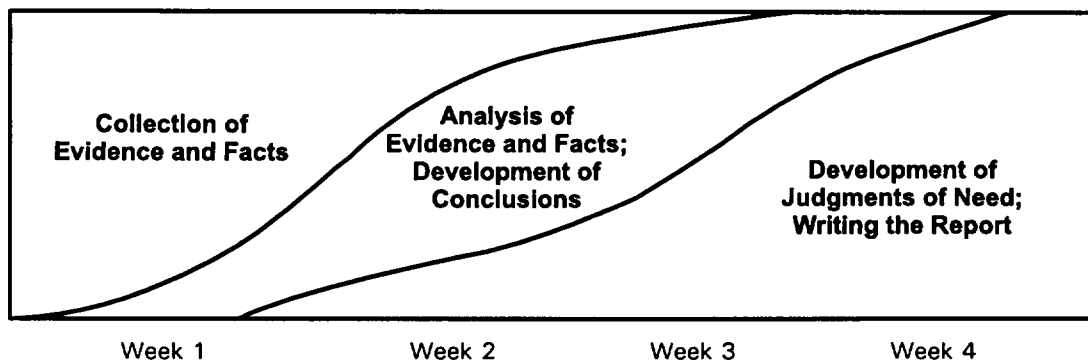


Figure 2-2. The three primary activity phases in an accident investigation overlap significantly.

2.5 Waivers

In some instances when an accident meets the criteria for a Type A or Type B investigation, it nevertheless may be desirable not to conduct a Type A or Type B investigation if the head of the field element determines that the investigation would lead to no significant lessons learned. In such a case, the head of the field element submits a request for waiver, within five calendar days after the accident is categorized, to the Office of the Deputy Assistant Secretary for Oversight.

The Office of the Deputy Assistant Secretary for Oversight will review waiver requests and either recommend approval or disapproval of the requests in writing to the Assistant Secretary for Environment, Safety and Health, who will make the final determination in writing.

2.6 Limited Scope Accident Investigations

Limited scope investigations may be conducted when chartered by the Assistant

Secretary of Environment, Safety and Health, as prescribed in DOE Order 225.1A, when it is determined that a formal but less resource-intensive investigation is warranted.

Limited scope investigation boards consist of a board chairperson and one to three board members. The requirements for selecting board chairpersons and board members are identical to those for Type A and Type B accident investigation boards. Limited scope investigations are expected to be completed within 10 to 14 days of board appointment.

The process for conducting limited scope investigations uses the same principles as those described previously for Type A and Type B accident investigations. The limited scope investigation may have an abbreviated scope, as determined by the charter. Facts are collected and analyzed using the analytical techniques described in Section 7 of this workbook (although the processes for using them are abbreviated); causal factors are identified; judgments of need are developed; and a report is written and submitted to the appointing official.

KEY POINTS TO REMEMBER

DOE's accident investigation program provides timely, useful, and needed information regarding the causal factors of accidents in order to prevent future accidents from similar causes.

The Office of Security Evaluations administers the accident investigation program through the Program Manager in that office. The Program Manager also coordinates accident investigation training.

Each person involved in the accident investigation process plays a specific role:

- The Assistant Secretary for Environment, Safety and Health (EH-1) serves as appointing official for Type A accident investigation boards (unless this responsibility is specifically delegated to the head of a field element), reviews all delegated Type A accident investigation reports, grants waivers of the requirement to conduct Type A or Type B accident investigations, and charters limited scope investigations.
- The **appointing official** establishes the board's authority; selects the board chairperson and board members; briefs the board before they begin their investigation activities; accepts the report; and closes the investigation.
- **Heads of field elements** ensure that DOE and contractor organizations in the field maintain investigative site readiness and develop and implement corrective action plans.
- **Field or program office points of contact** ensure that sites can effectively respond to, conduct, or assist with accident investigations; serve as a liaison to the Program Manager on accident investigation matters; and assist in distributing lessons learned.
- **Board chairpersons** have overall responsibility for the investigation and are accountable to the appointing official.
- **Board members** perform accident investigation activities—gather information, analyze data, and report findings.

The field or program office point of contact is responsible for ensuring that the site can support accident investigation activities. To prepare for these activities, points of contact should:

- Assure that site readiness personnel are trained to respond to accidents, preserve and collect evidence, and take witness statements
- Periodically verify readiness by conducting drills to practice readiness skills.

The accident investigation cycle has a nominal 30-calendar-day timeline for completion. However, individual investigation schedules may vary, depending on an accident's complexity.

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Accident Investigation Equipment Checklist

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(✓)	Checklist	Notes
DOCUMENT PACKET		
	DOE Order 225.1A, <i>Accident Investigations</i>	
	Implementation Guide for Use with DOE Order 225.1A	
	Accident Investigation Preliminary Interview List	
	Witness Statement Form	
	Change Analysis Form	
	Barrier/Control Analysis Form	
	Chairperson Day Planner	
SITE DOCUMENTS		
	Organization charts	
	Facility maps	
	Applicable blueprints and as-built drawings	
	Policies and procedures manuals	
	ES&H manuals	
	Training manuals	
	Phone books (local, facility, and Headquarters)	



Accident Investigation Equipment Checklist

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(✓)	Checklist	Notes
OFFICE SUPPLIES		
	18 In/Out baskets	
	Adhesive notes (assorted sizes & colors)	
	Adhesive flags (assorted colors)	
	Chart paper (1/4" grid)	
	12 hard-bound journals	
	2 boxes suspension folders	
	12 letter-size expandable files	
	3 boxes computer disks	
	1 box full-page dividers	
	8 calendars	
	3 boxes pens, red	
	3 boxes pens, black	
	4 heavy black markers	
	1 box yellow highlighters	
	1 box pencils (hard)	
	12 boxes paper clips	
	12 boxes binder clips (assorted)	
	1 box rubber bands (assorted)	
	1 heavy-duty stapler	
	1 box heavy-duty staples	
	1 heavy-duty staple remover	
	4 boxes staples	
	8 desk staplers	
	8 staple removers	
	8 tape dispensers/tape	



Accident Investigation Equipment Checklist

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(✓)	Checklist	Notes
OFFICE SUPPLIES (cont'd)		
	4 scissors	
	2 three-hole punch	
	2 clipboards	
	12 three-ring binders - (1", 2", 3")	
	2 boxes manila file folders	
	Assorted file folder labels	
	Overnight mailing supplies	
	12 phone message pads	
	6 bottles all-purpose whiteout	
	Assorted envelopes (9"x12", 5"x7", 10"x13")	
	DOE-HQ memorandum letterhead	
	24 ruled notepads	
	12 steno pads	
	3" x 5" index cards	
	Return address labels	
	Packing boxes	
	5 boxes double-pocket portfolio (assorted colors)	
	Nylon filament tape	
OFFICE EQUIPMENT		
	Telephones	
	Answering machine or voice mail capability	
	Computers/software	Provided by EH-21 for Type A investigations
	Letter-quality printers	Provided by EH-21 for Type A investigations
	Camera with flash	Contained in Type A "Go Kit"
	Film	



Accident Investigation Equipment Checklist

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(✓)	Checklist	Notes
OFFICE EQUIPMENT (cont'd)		
	Portable cellular phone	
	50 3.5" formatted diskettes with labels	
	Pagers (beepers)	
	Fax machine	
	Cassette tape recorder, cassettes, and batteries	
	High-speed photocopier (multifunction)	
	Document shredder	
	Electric pencil sharpener	
TOOLS		
	Flashlight or lantern (explosion-proof)	
	Spare batteries and bulb for flashlight	
	Steel tape measure - 100-foot	
	Scale - 12-inch ruler	
	Scissors (heavy-duty)	
	Compass - professional type (e.g. MILSPEC Lensatic or surveyor's)	
	Magnifying glass	
	Inspection mirrors - large & small dental	
	Toothbrush - natural bristle	
	Twine - 300-ft package wrapping	
	Cardboard tags, string	
	Masking tape (2-inch)	
SPECIAL DEVICES		
	Engineer's scale	
	Metric conversions	



Accident Investigation Equipment Checklist

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(✓)	Checklist	Notes
SPECIAL DEVICES (cont'd)		
	Calculators	
	Calipers, inside and outside diameter	
PERSONAL PROTECTION EQUIPMENT		
	Hard hats	
	First aid kit	
	Glasses, other eye protection	
	Gloves, leather or canvas	
	Ear plugs, other hearing protection	
	Vest, orange flagperson's	
	Steel-toed boots or shoes	
	Dust masks, respirators	

This list is not exhaustive or limiting. Use this checklist as a starting point and add or delete items as needed.



Accident Investigation "Go Kit" Contents

(Page 1 of 2)

(✓)	Description	Quantity
SUITCASE 1 OF 3		
	Bushnell 10 x 50 Binoculars	1
	Gerber Multi-Plier Tool	1
	30' Steel Tape Measure	1
	100' Steel Tape Measure	1
	Two Wheel Rolatape	1
	NiteTracker Rechargeable Spotlight	1
	Replacement Bulbs for NiteTracker	2
	Kodak DC50 Zoom digital camera (S/N EKA63701001 & EKA62501451)	1
	Energizer Hi Energy Lithium AA batteries (camera)	12
	Film cards for camera	5
	Camera connector cables	2 sets
	AC Adapter (NiteTracker)	1
	DC Adapter (NiteTracker)	1
	Evidence Tags (packs)	2
	Evidence/Security tape (108')	2
	Inspection Mirror	2
	Tweezer (metal)	2
	Tweezer (metal)	2
	Tweezer (metal)	2
	Tweezer (disposable)	24



Accident Investigation "Go Kit" Contents

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(✓)	Description	Quantity
Suitcase 2 of 3		
	Bushnell 7 x 35 Binoculars	1
	Super Sabrelite Flashlight	10
	Duracell "C" size Battery Pack (10-battery pack)	3 packs
	Latex Exam Gloves: Small (box)	1
	Latex Exam Gloves: Medium (box)	1
	Latex Exam Gloves: Large (box)	1
	Latex Exam Gloves: X-Large (box)	1
	Nuisance Odor Masks	10
	Vionex Skin Wipes (50/box)	1
Suitcase 3 of 3		
	Minolta Freedom Action Zoom Camera	1
	Kodak film 100, 12 exp	2 rolls
	Kodak film 200, 12 exp	2 rolls
	Kodak film 400, 12 exp	1 roll
	Kodak film 400, 24 exp	1 roll
	Camera battery, C123A	3
	Evidence bags - paper, style 86	38
	Evidence bags - paper, style 25	29
	Evidence bags - paper, style 12	25
	Evidence bags - paper, style 4	60
	Evidence bags - zip lock plastic, 9 x 12	50
	Evidence bags - zip lock plastic, 5 x 8	50
	Evidence bags - zip lock plastic, 4 x 6	50
	Evidence bags - zip lock plastic, 3 x 5	50